

Notice of Allowability

Application No.

09/934,975

Examiner

Dave Czekaj

Applicant(s)

COTE ET AL.

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 8/25/06.
2. ☒ The allowed claim(s) is/are 10-12, 19-21, and 23-25 (Renumbered 1-9).
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William Plut on 9/5/06.

The application has been amended as follows:

In the claims on page 2

In claim 10 steps iv), v), and vi)

Replace "video buffer" with - - vbv buffer - - .

In the claims on page 4

In claim 19 steps iv), v), and vi)

Replace "video buffer" with - - vbv buffer - - .

In the claims on pages 5-6

In claim 23 steps iv), v), and vi)

Replace "video buffer" with - - vbv buffer - - .

In the claims on page 5

In claim 21

Replace "vi)" with - - v) - - .

In the claims on page 7

In claim 25 immediately before step c)

Insert - - v) - - in front of "means for setting a quantizer scale code for each macroblock in the current frame

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

Ishiyama (2001/0008544) discloses an apparatus that performs rate control taking both the picture quality and time delay into account (Ishiyama: paragraph 0001). This apparatus comprises "a frame buffer" (Ishiyama: figure 3, items 26 and 37), "an encoder receiving input from the buffer" (Ishiyama: figure 3, item 2), "a vbv buffer receiving input from encoder" (Ishiyama: figure 3, wherein the vbv buffer consists of the input and output buffers), "a channel interface receiving input from vbv buffer" (Ishiyama: figure 3, wherein the channel interface is the input and output buffer monitors), "a channel rate control connected to the vbv buffer and channel interface" (Ishiyama: figure 3, wherein the channel rate control is the reception and sending channel monitor), and "a transcoder rate control connected to the frame buffer, encoder, vbv buffer, and channel rate control, configured to monitor the fullness of the vbv buffer" (Ishiyama: figure 3, item 3, paragraph 0091, wherein the monitoring is done by the input buffer monitor). Ishiyama further discloses "calculating a current value of the number of bits in the video buffer and if the current value is less than a threshold, decreasing the rate reduction and if the current value is greater than

an upper threshold, increasing the rate reduction" (Ishiyama: paragraphs 0094 and 0095, wherein the underflow and overflow indicate that data has gone above/below a threshold value, increase/decreasing the rate reduction is diminishing/increasing the code volume in the buffers for the plurality of frames). However, Ishiyama fails to disclose the transcoder rate control configured to monitor data in the frame buffer). Ishiyama further fails to disclose the specifics of the rate reduction computation as claimed. A further search was conducted which failed to yield any prior art. Therefore, the prior art fails to teach or render obvious these limitations taken within the others in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DJC

Mehrdad Dastouri
MEHRDAD DASTOURI
SUPERVISORY PATENT EXAMINER
TC 2600